

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
27 October 2005 (27.10.2005)

PCT

(10) International Publication Number
WO 2005/101572 A1

(51) International Patent Classification⁷: **H01Q 5/00**

(21) International Application Number: **PCT/KR2004/000749**

(22) International Filing Date: 31 March 2004 (31.03.2004)

(25) Filing Language: **Korean**

(26) Publication Language: **English**

(71) Applicant (for all designated States except US): ACE TECHNOLOGY [KR/KR]; #156B 5L. 727-4, Gojan-dong, Namdong-Ku, Incheon 405-822 (KR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): LEE, Jin-Woo [KR/KR]; #508 Yangji Bldg., 369, Songnae 1-dong, Sosa-gu, Bucheon-si, Gyeonggi-do 422-817 (KR). MUN, Sang-Hyuk [KR/KR]; 765-65, Jakjeon-dong, Gyeyang-gu, Incheon 407-816 (KR).

(74) Agent: SHINSUNG PATENT FIRM: 2F., Line Bldg., 823-30 Yeoksam-dong, Kangnam-ku, Seoul 135-080 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

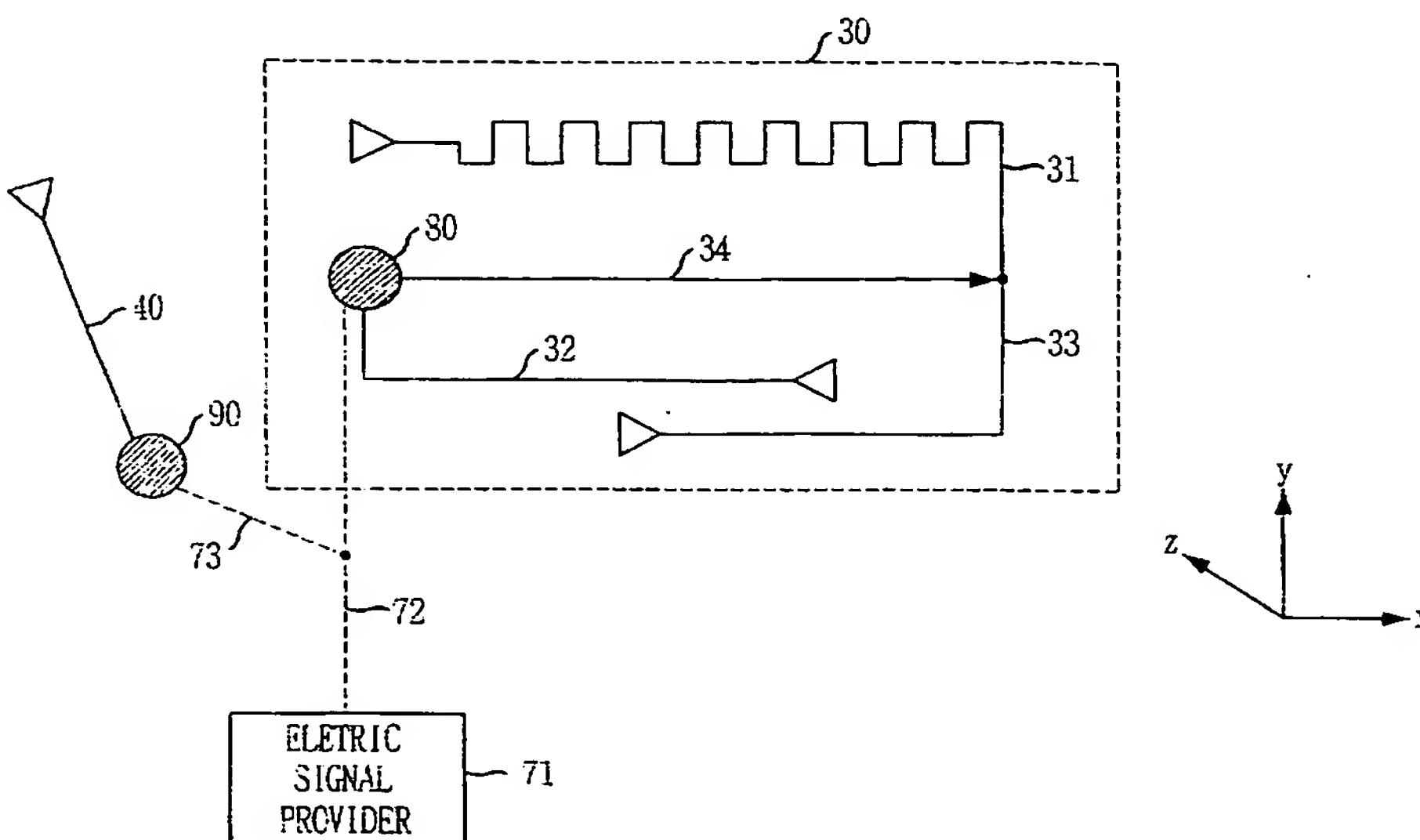
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MULTIBAND ANTENNA USING WHIP HAVING INDEPENDENT POWER FEEDING IN WIRELESS TELECOMMUNICATION TERMINAL



WO 2005/101572 A1

(57) Abstract: Provided is a multi-band antenna using a whip having independent power feeding in a wireless telecommunication terminal. The multi-band antenna of a wireless telecommunication terminal includes a first feed point for feeding an electric signal provided from an electric signal provider; a second feed point for feeding an electric signal provided from the electric signal provider; a plurality of radiators for radiating the electric signal fed from the first feed point into an electromagnetic wave signal; and a whip radiator for radiating the electric signal fed from the second feed point into an electromagnetic wave signal in order to increase the radiant efficiency of the electromagnetic wave signal radiated from a plurality of radiator and extend a bandwidth.

